

Mr. Ken Dalrymple  
Key Plastics, Inc.  
1615 West McDonald Street  
Hartford City, Indiana 47348

Re: 009-12016-00018  
First Significant Permit Modification to  
Part 70-009-7508-00018

Dear Mr. Dalrymple:

Key Plastics, Inc. was issued a Part 70 permit on January 12, 1999 for a plant that manufactures plastic parts for automotive door handles. A letter requesting an amendment to the permit was received on March 13, 2000. Pursuant to the provisions of 326 IAC 2-7-12 significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of deleting the dry filters monitoring requirements, thermal oxidizing system duct velocity and the removal of the incinerator in the permit, since it was dismantled from the plant.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida de Guzman OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for (Aida De Guzman) or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments

APD

cc: File -Blackford County  
Blackford County Health Department  
Air Compliance Section Inspector - Jim Thorpe  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

## **PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT**

**Key Plastics, Inc.  
1615 W. McDonald Street  
Hartford City, Indiana 47348**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T009-7508-00018	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: January 12, 1999
1 <sup>st</sup> Significant Permit Modification No.: 009-12016-00018	Pages Affected: 5, 29, 30, 31, 32, 33, 34, 35
Issued by: Paul Dubenetzky, Chief Permit Branch Office of Air Management	Issuance Date:

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a plastic parts painting process. The source produces painted automobile door handles.

Responsible Official: Ken Dalrymple  
Source Address: 1615 W. McDonald Street, Hartford City, IN 47348  
Mailing Address: 1615 W. McDonald Street, Hartford City, IN 47348  
SIC Code: 3714  
County Location: Blackford  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Minor Source, under PSD Rules  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (1) One (1) manual sample spray coating booth capable of processing 40 units per hour with dry filters as control. This booth exhausts through Stack No. 10 and is not controlled by the thermal oxidizer.
- (2) A plastic parts washing and painting system including:
  - (a) One (1) 8-inch Tube-O-Flame, located at Stage No.2, with a maximum heat input rate of 1.00 Million British thermal units per hour burning natural gas and exhausting at Stack No. 2.
  - (b) One (1) 6-inch Tube-O-Flame, located at Stage No.3, with a maximum heat input rate of 0.60 Million British thermal units per hour burning natural gas and exhausting at Stack No. 3.
  - (c) One (1) dry-off oven with a maximum heat input rate of 0.60 Million British thermal units per hour burning natural gas and exhausting at Stack No. 5.
  - (d) One (1) prime coat paint booth capable of processing 10,800 units per hour.
  - (e) One (1) prime bake oven with a maximum heat input rate of 0.80 Million British thermal units per hour burning natural gas.

**SECTION D.1** was deleted, since the facility in this section has been dismantled from the plant and is no longer in operation.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) manual sample spray coating booth capable of processing 40 units per hour with dry filters as control. This booth exhausts through Stack No. 10 and is not controlled by the thermal oxidizer.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the manual spray booth shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The potential VOC emissions from the manual spray booth are less than 25 tons/yr. Therefore, 326 IAC 8-1-6 does not apply. Prior to any change in the operation which may result in an increase in potential emissions exceeding those specified in 326 IAC 8-1-6, this change must be approved by the Office of Air Management.

### Compliance Determination Requirements

#### D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.4 Particulate Matter (PM)

Pursuant to CP009-5583, issued on March 20, 1997, the dry filters for PM control shall be in place and operating at all times when the manual spray booth is in operation.

#### D.1.5 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack 10 while the booth are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

**Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.1.6 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.1.4 and D.1.5, the Permittee shall maintain a log of weekly overspray observations and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (2) A plastic parts washing and painting system including:
- (a) One (1) 8-inch Tube-O-Flame, located at Stage No.2, with a maximum heat input rate of 1.00 Million British thermal units per hour burning natural gas and exhausting at Stack No. 2.
  - (b) One (1) 6-inch Tube-O-Flame, located at Stage No.3, with a maximum heat input rate of 0.60 Million British thermal units per hour burning natural gas and exhausting at Stack No. 3.
  - (c) One (1) dry-off oven with a maximum heat input rate of 0.60 Million British thermal units per hour burning natural gas and exhausting at Stack No. 5.
  - (d) One (1) prime coat paint booth capable of processing 10,800 units per hour.
  - (e) One (1) prime bake oven with a maximum heat input rate of 0.80 Million British thermal units per hour burning natural gas.
  - (f) Two (2) base coat paint booths capable of processing 10,800 units per hour each, and operating in series with respect to each other.
  - (g) One (1) pearl coat paint booth capable of processing 10,800 units per hour.
  - (h) Two (2) clear coat paint booths capable of processing 10,800 units per hour each, and operating in series with respect to each other.
  - (i) One (1) final bake oven consisting of a radiant heating portion and a direct heating portion with maximum heat input rates of 0.40 Million British thermal units per hour and 0.80 Million British thermal units per hour, respectively. Both units fire natural gas.
  - (j) One (1) regenerative thermal oxidizer, maximum heat input rate of 5.2 Million British thermal units per hour firing natural gas and exhausting at Stack No. 11.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Best Available Control Technology (BACT) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 and CP009-5583, issued on March 20, 1997:

- (a) The regenerative thermal oxidizer and the fans moving the exhaust fumes from the six (6) automated coating booths of the plastic parts painting system, the prime bake oven and the final bake oven to the thermal oxidizer shall all be in operation at all times that one or more of the six (6) automated coating booths, the prime bake oven or the final bake oven is operated, and that the water curtain and dry filters that control particulate matter emissions shall be operating and in place at all times that the system is in operation.

- (b) The fans shall operate within a fan amperage, as determined by the most recent test, that is demonstrated to achieve eighty five percent (85%) capture of the volatile organic compounds (VOC) emitted from the parts being coated and baked.
- (c) The regenerative thermal oxidizer shall operate above a minimum operating temperature, as determined by the most recent test, that is demonstrated to achieve at least ninety five percent (95%) destruction of captured volatile organic compounds (VOC).
- (d) The regenerative thermal oxidizer and air recirculation system shall continue to be operated after the painting operations cease for at least the minimum period of time, as determined by the most recent test, demonstrated to purge the recirculation air system's residual VOC content through the thermal oxidizer and reduce the VOC concentration in the recirculated air to ambient levels.
- (e) The input of VOC to the plastic parts painting system and the usage of cleanup solvent for the plastic parts painting system shall be limited to 1,164 tons used per twelve (12) consecutive month period. This limitation will prevent the VOC emissions from the plastic parts painting system being greater than 224.4 tons per year. This limitation is based upon the use of a regenerative thermal oxidizer with an overall control efficiency of 80.75%.

#### D.2.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the six (6) automated spray booths shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

### Compliance Determination Requirements

#### D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the year 2000, the Permittee shall perform, as required by the Title V permit, testing of the thermal oxidizer's overall control efficiency (capture and destruction) according to 326 IAC 3- 6 (Source Sampling Procedures) using the methods specified in the rule or as approved by the commissioner. This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.



## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.2.5 Particulate Matter (PM)**

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Pursuant to CP009-5583, issued on March 20, 1997, the dry filters for PM control shall be in place and operating at all times when the six (6) automated spray booths are in operation.

## **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.2.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.1, and D.2.5, the Permittee shall maintain a log of daily parametric monitoring (specifically fan amperage, and operating temperature of the thermal oxidizer), date(s) and times of shutdown periods, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.2.7 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.3

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

The following specifically regulated insignificant activities:

- (a) One (1) boiler firing natural gas with a maximum heat input rate of 0.84 Million British thermal units per hour and exhausting at Stack No. 9.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-2]

The PM from the 0.84 million British thermal units per hour boiler shall not exceed 0.1 pounds per million British thermal units of heat input.

### Compliance Determination Requirements

#### D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.



## Indiana Department of Environmental Management Office of Air Management

### Technical Support Document (TSD) for a Part 70 Operating Permit

#### Source Background and Description

Source Name: Key Plastics, Inc.  
 Source Location: 1615 West McDonald Street, Hartford City, Indiana 47348  
 County: Blackford  
 SIC Code: 3714  
 Operation Permit No.: T009-7508-00018  
 Permit Reviewer: Aida De Guzman

The Office of Air Management (OAM) has reviewed an application from Key Plastics, Inc. relating to the request to remove equipment/operation, including the deletions of some monitoring requirements in the issued Part 70 Permit (T009-7508-00018).

The source's request for permit modification is as follows (changes are bolded and deletions are struck-through for emphasis):

#### Source's Request 1:

The natural gas fueled incinerator with heat input rating of 0.8 million British Thermal Units per hour (mmBtu/hr) has been dismantled from the plant. The issued permit should be modified to reflect this change.

#### OAM Response 1:

The referenced natural gas fueled incinerator with heat input rating of 0.8 mmBtu/hr numbered A.2(1) has been deleted from the issued Part 70 permit as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
 [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

~~(1) One (1) natural gas fueled incinerator with a maximum heat input rate of 0.8 million British thermal units per hour and a design capacity of 50 pounds per hour. This incinerator burns cured paint from racks.~~

Subsequent facilities in Section A.2 are re-numbered accordingly.

The entire Section D.1 has also been deleted, since it is no longer applicable. Subsequent sections and conditions are re-numbered accordingly.

#### Source's Request 2:

The dry filters and water curtains are not pollution control. They are installed for product quality purposes. Therefore, no monitoring requirements should be required for them.

#### OAM Response 2:

OAM agrees that the dry filters and water curtains are **not** pollution control, and no overspray will be exhausted into the atmosphere since it will be burned off by the oxidizer. Therefore, Condition

D.3.6, Monitoring Requirements, which is now D.2.6 will be deleted. Record keeping of the weekly overspray observations will also be deleted in Condition D.3.7, now D.2.7. However, for housekeeping and OSHA purposes, the following statements in Condition D.3.1, now D.2.1 will stay, "that the dry filters and water curtain shall be operating and in place at all times that the system is in operation".

The dry filters "Monitoring" requirements (condition D.2.5, now D.1.5) in Section D.2 now Section D.1 will remain, since the paint booth in this section is not controlled by the thermal oxidizer.

Source's Request 3:

The source's other area of concern is the monitoring of duct velocity. Reading have been taken during stack tests and system air balancing. This is not a system of record keeping that can be performed daily. Monitoring equipment cannot be installed due to damage to the probe from the paint and solvents.

OAM Response 3:

The TV permit is revised by removing "duct velocity" in all the permit conditions of Section D.3, now Section D.2 that referenced it, since fan amperage can be translated to duct velocity.

**Recommendation**

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete permit application for the purposes of this review was received on March 13, 2000.

**Federal Rule Applicability**

There are no new federal rules that will be applicable to the permit change. The determination made in the original Part 70 permit T009-7508-00018 stays the same.

**State Rule Applicability - Entire Source**

There are no new state rules that will be applicable to the permit change. The determination made in the original Part 70 permit T009-7508-00018 stays the same.

**Conclusion**

The operation of this plastic parts painting process for automotive door handles shall be subject to the conditions of the attached proposed **Significant Part 70 Permit Modification No. 009-12016-00018**.

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for a Significant Part 70 Operating Permit Modification

Source Name: Key Plastics, Inc.  
Source Location: 1615 W. McDonald Street, Hartford City, Indiana 47348  
County: Blackford  
SIC Code: 3714  
Operation Permit No.: 009-7508-00018 Issued: January 12, 1999  
Significant Permit Modification: 009-12016-00018  
Permit Reviewer: Aida De Guzman

On October 2, 2000, the Office of Air Management (OAM) had a notice published in the News-Times, Hartford, Indiana, stating that Key Plastics, Inc. had applied for a Part 70 Operating Permit to relax some existing conditions in the issued Part 70 permit that are not necessary. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAM has decided to make the following revisions to the permit (changes are bolded and deletions are struck-through for emphasis).

Although Condition D.3.4, now D.2.4 Testing Requirements is not part of the source's requests for modification, for clarification IDEM has revised it as follows:

#### D.3.2. 4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the year 2000, the Permittee shall perform, as required by the Title V permit, ~~the initial inlet and outlet VOG~~ testing of the thermal **oxidizer's overall control efficiency (capture and destruction)** according to 326 IAC 3-2-4 ~~6~~ (Source Sampling Procedures) using the methods specified in the rule or as approved by the commissioner. This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

